Benchmark System Summary	State: OHIO	MLRA / CRA: Statewide
		Location Area: Statewide
Land Use: Cropland		Benchmark System Description
Template Label: Crop, 6-15%, Animal Prod		Cropland is used for grain and forage production. Some crops are no tilled and some crops are mulch tilled. Sheet and rill erosion is a concern as well as concentrated flow (ephemeral) erosion. Soil tests are not taken on a regular basis, generally nutrients are over applied. Manure is applied at unknown rates and nutrient credit are not given for manure. Sediment, nutrients, and pesticides are water quality concerns in the area.
System Name/Phrase: Crop Manure Application		

Existing Practices:
0
0
0
0
0

Resouce Concerns	Benchmark Effects
Soil Erosion; Sheet & Rill	Erosion exceeds tolerable levels by 2 and 3 times. Sediment, nutrient, pesticide runoff.
Soil Erosion; Concentrated Flow	Annual emphemeral gullies erode to a depth of 6-8" by 18" wide (35-40 tons/1000 ft.)
Water Quality, Surface Water; Pesticides, Nutrients, Organics, Sediment	Erosion carries manure, nutrients, pesticides, and sediment to surface water.
Plants, Cropland Productivity	Erosion is reducing the soil's productive capacity. Lower O.M. and Avail Water Cap.
0	
0	
0	
0	
0	
0	
0	

Candidate Practices - Physical Effects	State: OHIO	MLRA / CRA: Statewide	Page 1 of 2
		Location Area: Statewide	
Land Use: Cropland		Benchmark System Description	
Template Label: Crop, 6-15%, Animal Prod		Cropland is used for grain and forage production. Some crops are no tilled and some crops are mulch tilled. Sheet and rill erosion is a concern as well as concentrated flow (ephemeral) erosion. Soil tests are not taken on a regular basis, generally nutrients are over applied. Manure is applied at unknown rates and nutrient credit are not given for manure. Sediment, nutrients, and pesticides are water quality concerns in the area.	
System Name/Phrase: Crop Manure Application			

Resource Concerns >		Soil Erosion; Sheet & Rill	Soil Erosion; Concentrated Flow	Water Quality, Surface Water; Pesticides, Nutrients, Organics, Sediment	Plants, Cropland Productivity	0	0	0
Candidate Practices ST=Short Term LT=Long Term								
Conservation Crop Rotation - 328	ST	Sl to Sig Decrease	Situational	Sl to Mod Decrease	Sl to Mod Decrease			
	LT	Sl to Sig Decrease	Situational	Mod to Sig Decrease	Sl to Mod Decrease			
Cover & Green Manure Crop - 340	ST	Sl to Mod Decrease	Sl Decrease	Mod to Sig Decrease	Sl Decrease			
	LT	Sl to Mod Decrease	Sl Decrease	Mod to Sig Decrease	Sl Decrease			
Contour Buffer Strips - 332	ST	Sl to Sig Decrease	Sl Decrease	Mod to Sig Decrease	Sl Decrease			
	LT	Sl to Sig Decrease	Sl to Sig Decrease	Mod to Sig Decrease	Sl Decrease			
Contour Farming - 330	ST	Sl to Mod Decrease	Sl Decrease	Mod to Sig Decrease	Sl Decrease			
	LT	Sl to Mod Decrease	Sl to Sig Decrease	Mod to Sig Decrease	Sl Decrease			
Filter Strip - 393A	ST	N/A	Insignificant	Sig Decrease	N/A			
	LT	N/A	Insignificant	Sig Decrease	N/A			
Nutrient Management - 590	ST	Facilitating	N/A	Sig Decrease	N/A			
	LT	Facilitating	N/A	Sig Decrease	N/A			
Pest Management - 595	ST	N/A	N/A	Sig Decrease	Sl to Sig Decrease			
	LT	N/A	N/A	Sig Decrease	Sl to Sig Decrease			
Residue Management, Mulch till - 329B	ST	Sl to Sig Decrease	Sl Decrease	Sig Decrease	Sl to Sig Decrease			
	LT	Sl to Sig Decrease	Sl Decrease	Sig Decrease	Sl to Sig Decrease			
Residue Management, No-till & Strip Till - 329A	ST	Sl to Sig Decrease	Sl Decrease	Sig Decrease	Sl to Sig Decrease			
	LT	Sl to Sig Decrease	Sl Decrease	Sig Decrease	Sl to Sig Decrease			
Grassed Waterway - 412	ST	N/A	Sig Decrease	Mod Decrease	N/A			
	LT	N/A	Sig Decrease	Mod Decrease	N/A			
Waste Utilization - 633	ST	N/A	N/A	Sig Decrease	N/A			
	LT	N/A	N/A	Sig Decrease	N/A			
0	ST							
	LT							
0	ST							
	LT							
0	ST							
	LT							
0	ST							
	LT							

Candidate Practices - Physical Effects	State: OHIO	MLRA / CRA: Statewide	Page 2 of 2
		Location Area: Statewide	
Land Use: Cropland		Benchmark System Description	
Template Label: Crop, 6-15%, Animal Prod		Cropland is used for grain and forage production. Some crops are no tilled and some crops are mulch tilled. Sheet and rill erosion is a concern as well as concentrated flow (ephemeral) erosion. Soil tests are not taken on a regular basis, generally nutrients are over applied. Manure is applied at unknown rates and nutrient credit are not given for manure. Sediment, nutrients, and pesticides are water quality concerns in the area.	
System Name/Phrase: Crop Manure Application			

Resource Concerns >		0	0	0	0	0	0	0
Candidate Practices ST=Short Term LT=Long Term								
Conservation Crop Rotation - 328	ST							
	LT							
Cover & Green Manure Crop - 340	ST						#N/A	
	LT						#N/A	
Contour Buffer Strips - 332	ST							
	LT							
Contour Farming - 330	ST							
	LT							
Filter Strip - 393A	ST							
	LT							
Nutrient Management - 590	ST							
	LT							
Pest Management - 595	ST							
	LT							
Residue Management, Mulch till - 329B	ST							
	LT							
Residue Management, No-till & Strip Till - 329A	ST							
	LT							
Grassed Waterway - 412	ST							
	LT							
Waste Utilization - 633	ST							
	LT							
0	ST							
	LT							
0	ST							
	LT							
0	ST							
	LT							
0	ST							
	LT							

Resource Management System #1	State: OHIO	MLRA / CRA: Statewide	Page 1 of 2
		Location Area: Statewide	

Land Use:	Cropland
Template Label:	Crop 6-15% High Treatment
System Name/Phrase	RMS #1 High Treatment

Alternative Resource Management System #1 Narrative Description

The crops will be established using a no till system to address the sheet and rill soil erosion. Grassed waterways will be used to address the concentrated flow erosion. A green manure crop or forage crop will be established after after wheat harvest to take up nitrogen applied via summer manure application. Manure will be analyzed for nutrient content and applied a times, rates, and methods to ultilize nutrients and minimze runoff. Nutrient and pest management along with fiter strips adjacent to the streams will be applied to better meet crop needs and minimize nutrient and pesticide runoff.

Resource Concerns >		Soil Erosion; Sheet & Rill	Soil Erosion; Concentrated Flow	Water Quality, Surface Water; Pesticides, Nutrients, Organics, Sediment	Plants, Cropland Productivity	0	0	0
Candidate Practices ST=Short Term LT=Long Term								
Conservation Crop Rotation - 328	ST	+1 to +3	+/-	+1 to +2	+1 to +2	0	0	0
	LT	+1 to +3	+/-	+2 to +3	+1 to +2	0	0	0
Cover & Green Manure Crop - 340	ST	+1 to +2	+1	+2 to +3	+1	0	0	0
	LT	+1 to +2	+1	+2 to +3	+1	0	0	0
Filter Strip - 393A	ST	N/A	0	+3	N/A	0	0	0
	LT	N/A	0	+3	N/A	0	0	0
Nutrient Management - 590	ST	+	N/A	+3	N/A	0	0	0
	LT	+	N/A	+3	N/A	0	0	0
Pest Management - 595	ST	N/A	N/A	+3	+1 to +3	0	0	0
	LT	N/A	N/A	+3	+1 to +3	0	0	0
Residue Management, No-till & Strip Till - 329A	ST	+3	+1	+3	+1 to +3	0	0	0
	LT	+3	+1	+3	+1 to +3	0	0	0
Grassed Waterway - 412	ST	N/A	+3	+2	N/A	0	0	0
	LT	N/A	+3	+2	N/A	0	0	0
Waste Utilization - 633	ST	N/A	N/A	+3	N/A	0	0	0
	LT	N/A	N/A	+3	N/A	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0

Resource Management System #1	State: OHIO	MLRA / CRA: Statewide	Page 2 of 2
		Location Area: Statewide	

Land Use:	Cropland
Template Label:	Crop 6-15% High Treatment
System Name/Phrase	RMS #1 High Treatment

Alternative Resource Management System #1 Narrative Description

The crops will be established using a no till system to address the sheet and rill soil erosion. Grassed waterways will be used to address the concentrated flow erosion. A green manure crop or forage crop will be established after after wheat harvest to take up nitrogen applied via summer manure application. Manure will be analyzed for nutrient content and applied a times, rates, and methods to ultilize nutrients and minimze runoff. Nutrient and pest management along with fiter strips adjacent to the streams will be applied to better meet crop needs and minimize nutrient and pesticide runoff.

Resource Concerns >		0	0	0	0	0		
Candidate Practices ST=Short Term LT=Long Term								
Conservation Crop Rotation - 328	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Cover & Green Manure Crop - 340	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Filter Strip - 393A	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Nutrient Management - 590	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Pest Management - 595	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Residue Management, No-till & Strip Till - 329A	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Grassed Waterway - 412	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Waste Utilization - 633	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		

Resource Management System #2		State: OHIO		MLRA / CRA: Statewide Location Area: Statewide		Page 1 of 2		
Land Use:	Cropland	Alternative Resource Management System #2 Narrative Description						
Template Label:	Crop 6-15%, Mod.Treatment	The crops will be established using a no till system to address the sheet and rill soil erosion. Grassed waterways will be used to address the concentrated flow erosion. A green manure crop or forage crop will be established after after wheat harvest to take up nitrogen applied via summer manure application. Manure will be analyzed for nutrient content and applied a times, rates, and methods to ultilize nutrients and minimze runoff. Nutrient and pest management will be applied to better meet crop needs and minimize nutrient and pesticide runoff.						
System Name/Phrase	RMS #2 Moderate Treatment							
Resource Concerns > **Candidate Practices** **ST=Short Term LT=Long Term**		Soil Erosion; Sheet & Rill	Soil Erosion; Concentrated Flow	Water Quality, Surface Water; Pesticides, Nutrients, Organics, Sediment	Plants, Cropland Productivity	0	0	0
Conservation Crop Rotation - 328	ST	+1 to +3	+/-	+1 to +2	+1 to +2	0	0	0
	LT	+1 to +3	+/-	+2 to +3	+1 to +2	0	0	0
Cover & Green Manure Crop - 340	ST	+1 to +2	+1	+2 to +3	+1	0	0	0
	LT	+1 to +2	+1	+2 to +3	+1	0	0	0
Nutrient Management - 590	ST	N/A	N/A	+3	+1 to +3	0	0	0
	LT	N/A	N/A	+3	+1 to +3	0	0	0
Pest Management - 595	ST	+1 to +3	+1	+3	+1 to +3	0	0	0
	LT	+1 to +3	+1	+3	+1 to +3	0	0	0
Residue Management, No-till & Strip Till - 329A	ST	N/A	+3	+2	N/A	0	0	0
	LT	N/A	+3	+2	N/A	0	0	0
Grassed Waterway - 412	ST	N/A	N/A	+3	N/A	0	0	0
	LT	N/A	N/A	+3	N/A	0	0	0
Waste Utilization - 633	ST	0	N/A	+2	+	0	0	0
	LT	0	N/A	+2	+	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0

Resource Management System #2	State: OHIO	MLRA / CRA: Statewide	Page 2 of 2
		Location Area: Statewide	

Land Use:	Cropland
Template Label:	Crop 6-15%, Mod.Treatment
System Name/Phrase:	RMS #2 Moderate Treatment

Alternative Resource Management System #2 Narrative Description

The crops will be established using a no till system to address the sheet and rill soil erosion. Grassed waterways will be used to address the concentrated flow erosion. A green manure crop or forage crop will be established after after wheat harvest to take up nitrogen applied via summer manure application. Manure will be analyzed for nutrient content and applied a times, rates, and methods to ultilize nutrients and minimze runoff. Nutrient and pest management will be applied to better meet crop needs and minimize nutrient and pesticide runoff.

Resource Concerns >		0	0	0	0	0		
Candidate Practices ST=Short Term LT=Long Term								
Conservation Crop Rotation - 328	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Cover & Green Manure Crop - 340	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Nutrient Management - 590	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Pest Management - 595	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Residue Management, No-till & Strip Till - 329A	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Grassed Waterway - 412	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Waste Utilization - 633	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		

Resource Management System #3		State: OHIO		MLRA / CRA: Statewide		Page 1 of 2		
				Location Area: Statewide				
Land Use: Cropland		Alternative Resource Management System #3 Narrative Description						
Template Label: Crop, 6-15%, SL, Low Treatment		The crops will be established using a no till system to address the sheet and rill soil erosion. Grassed waterways will be used to address the concentrated flow erosion. Manure will be analyzed for nutrient content and applied a times, rates, and methods to ultilize nutrients and minimze runoff. Nutrient and pest management will be applied to better meet crop needs and minimize nutrient and pesticide runoff.						
System Name/Phrase: RMS #3 Low Treatment								
Resource Concerns > Candidate Practices ST=Short Term LT=Long Term		Soil Erosion; Sheet & Rill	Soil Erosion; Concentrated Flow	Water Quality, Surface Water; Pesticides, Nutrients, Organics, Sediment	Plants, Cropland Productivity	0	0	0
Conservation Crop Rotation - 328	ST	+1 to +3	+/-	+1 to +2	+1 to +2	0	0	0
	LT	+1 to +3	+/-	+2 to +3	+1 to +2	0	0	0
Nutrient Management - 590	ST	+1 to +3	+1	+3	+1 to +3	0	0	0
	LT	+1 to +3	+1	+3	+1 to +3	0	0	0
Pest Management - 595	ST	N/A	+3	+2	N/A	0	0	0
	LT	N/A	+3	+2	N/A	0	0	0
Residue Management, No-till & Strip Till - 329A	ST	N/A	N/A	+3	N/A	0	0	0
	LT	N/A	N/A	+3	N/A	0	0	0
Grassed Waterway - 412	ST	N/A	+3	+1	+	0	0	0
	LT	N/A	+3	+1	+	0	0	0
Waste Utilization - 633	ST	0	N/A	+2	+1	0	0	0
	LT	0	N/A	+2	+1	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0
0	ST	0	0	0	0	0	0	0
	LT	0	0	0	0	0	0	0

Resource Management System #3		State: OHIO	MLRA / CRA: Statewide			Page 2 of 2	
			Location Area: Statewide				
Land Use: Cropland		Alternative Resource Management System #3 Narrative Description					
Template Label: Crop, 6-15%, SL, Low Treatment		The crops will be established using a no till system to address the sheet and rill soil erosion. Grassed waterways will be used to address the concentrated flow erosion. Manure will be analyzed for nutrient content and applied a times, rates, and methods to ultilize nutrients and minimze runoff. Nutrient and pest management will be applied to better meet crop needs and minimize nutrient and pesticide runoff.					
System Name/Phrase: RMS #3 Low Treatment							

Resource Concerns > / Candidate Practices ST=Short Term LT=Long Term		0	0	0	0	0		
Conservation Crop Rotation - 328	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Nutrient Management - 590	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Pest Management - 595	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Residue Management, No-till & Strip Till - 329A	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Grassed Waterway - 412	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
Waste Utilization - 633	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		
0	ST	0	0	0	0	0		
	LT	0	0	0	0	0		